

Sheet 2

2) e) $|1|^*(0+01)^*$

f) $1^*0^*(1/\epsilon)0^* = 1^*0^*(1+0^*)$

h) تصحيح $(1+0)^* |$

no vowels

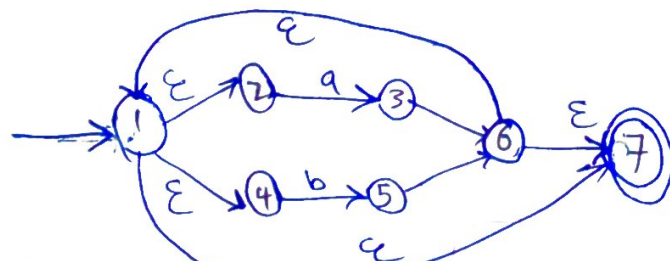
i) $L^*a(L+a)^*e(L+e)^*i(L+i)^*o(L+o)^*u(L+u)^*$

j) $|^*(L^*"*/"")^*|$ let $= "*/"$

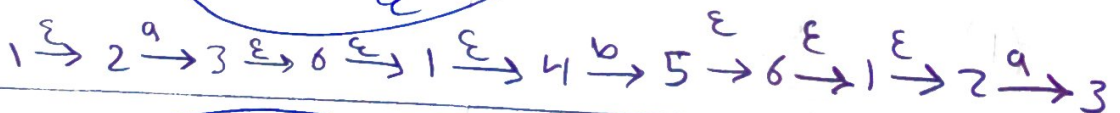
$\Rightarrow |^*(L^*c^*)^*| = |^*(L+c)^*|$

Sheet 3

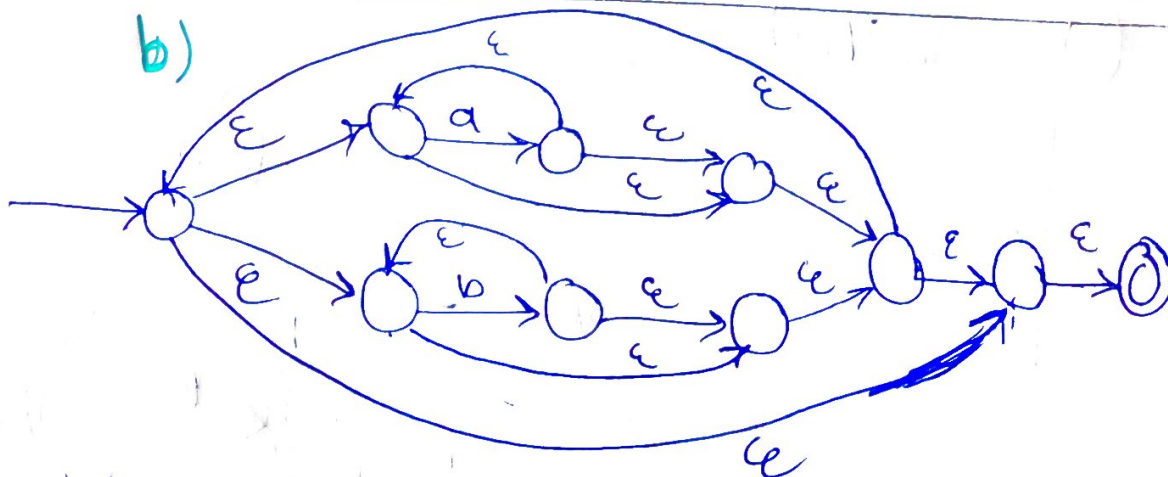
1) a)



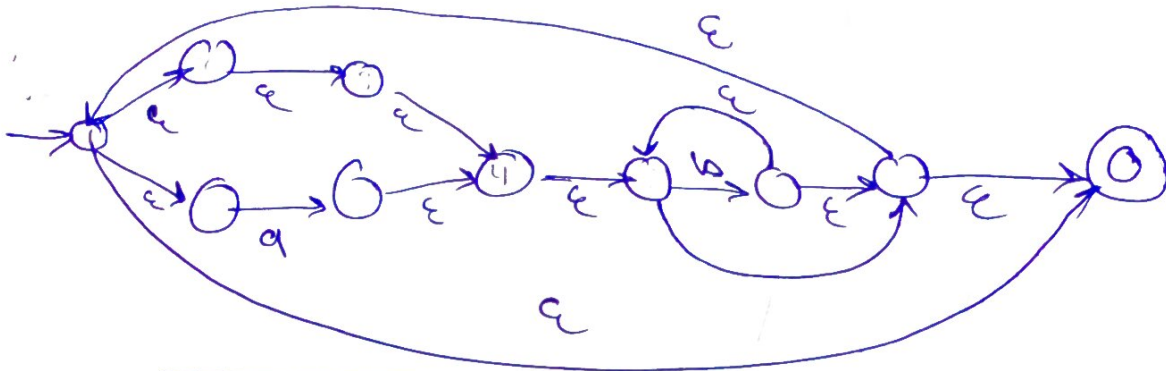
$(a+b)^*$



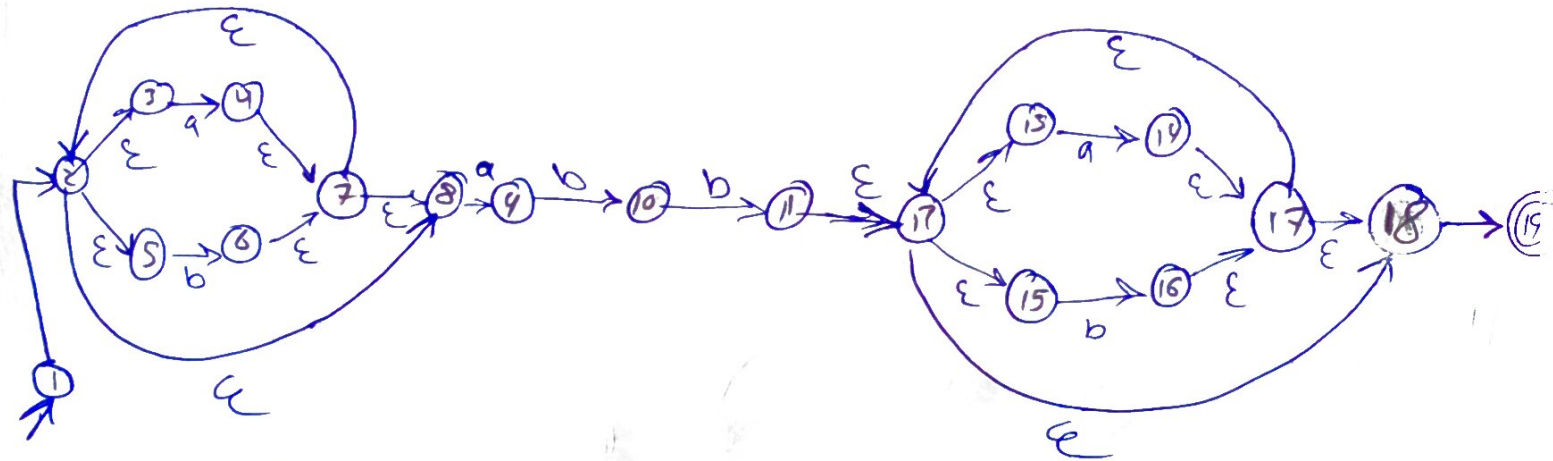
b)



c) $((\epsilon + a)b^*)^*$

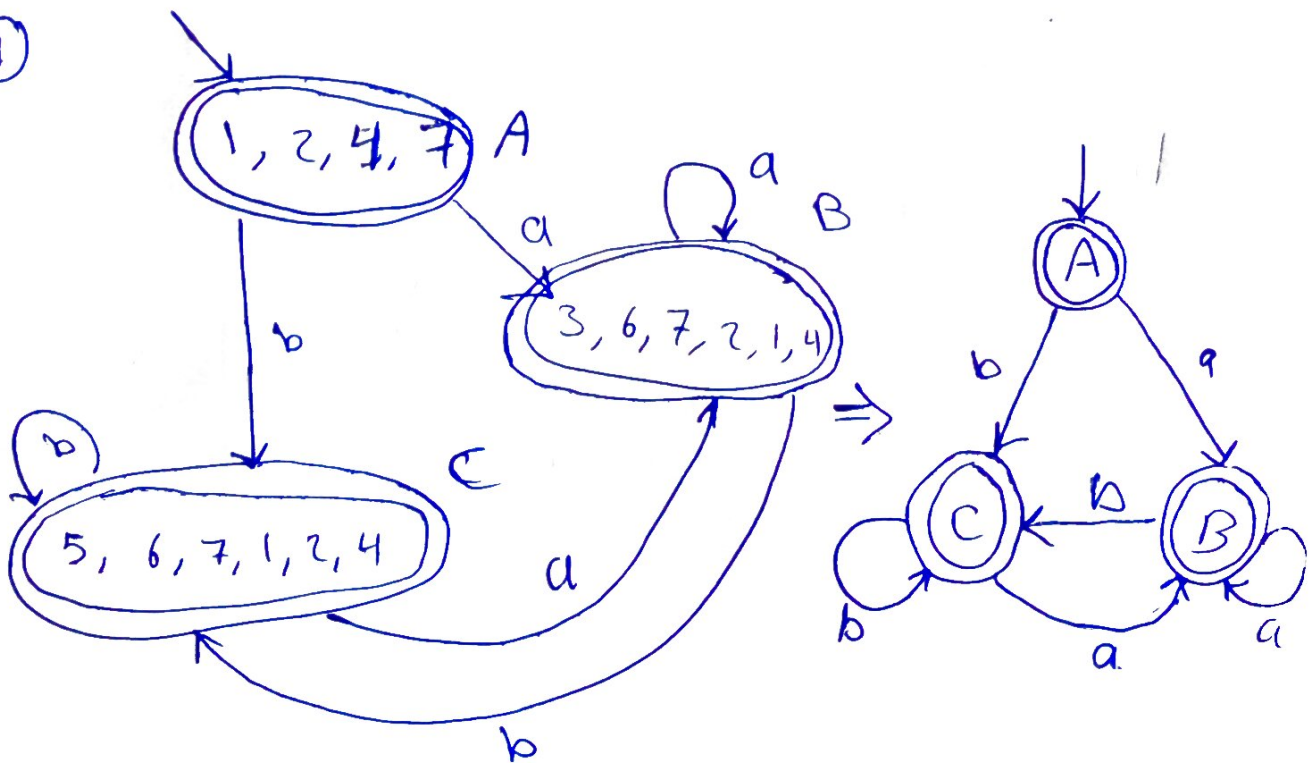


d) $(a + b)^* a b b (a + b)^*$



[3]

①



[2]

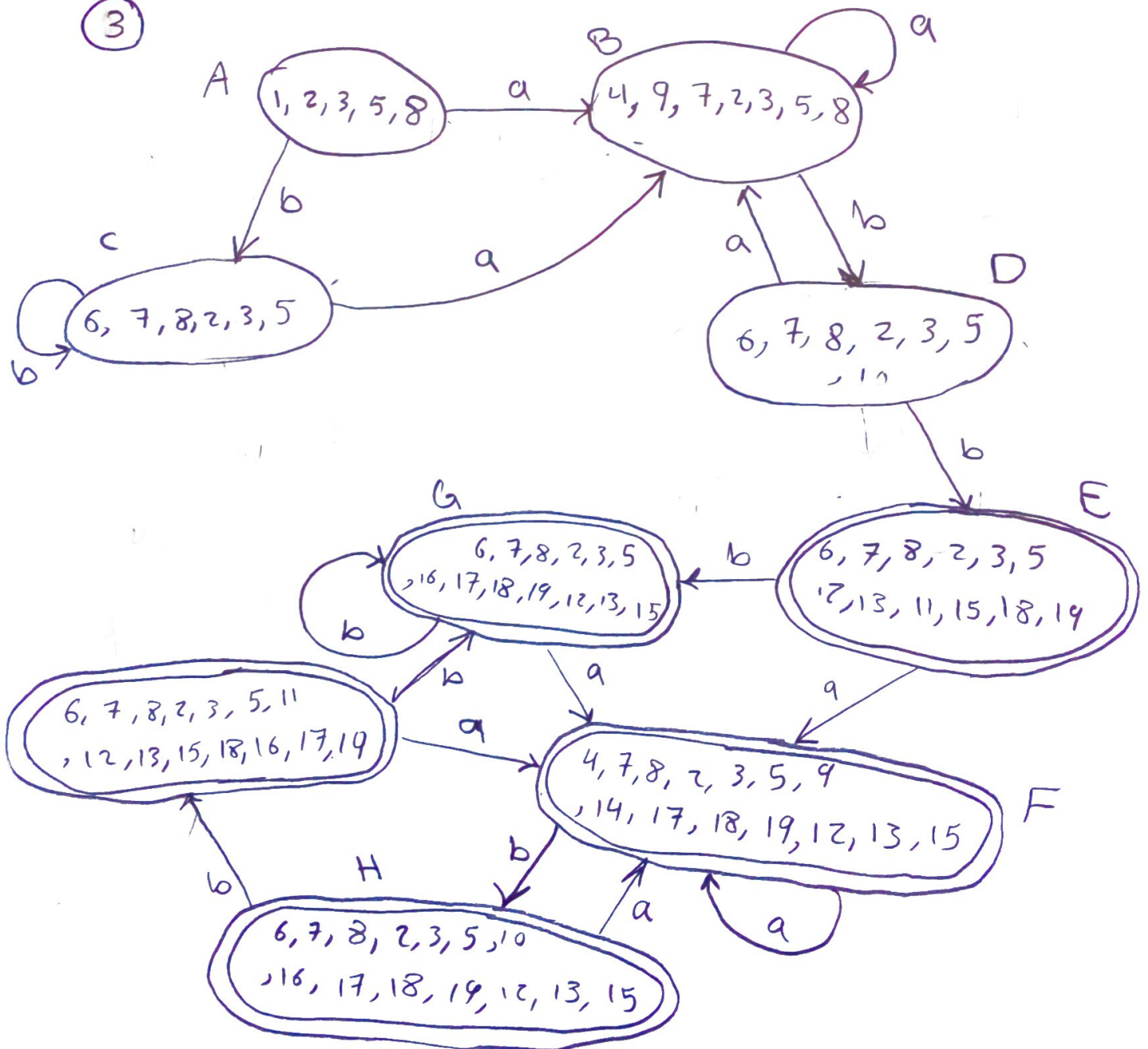
$$B = \epsilon\text{-Closure}(A, (a))$$

$$= \{3, 6, 7, 2, 1, 4\}$$

$$C = \epsilon\text{-Closure}(A, (b))$$

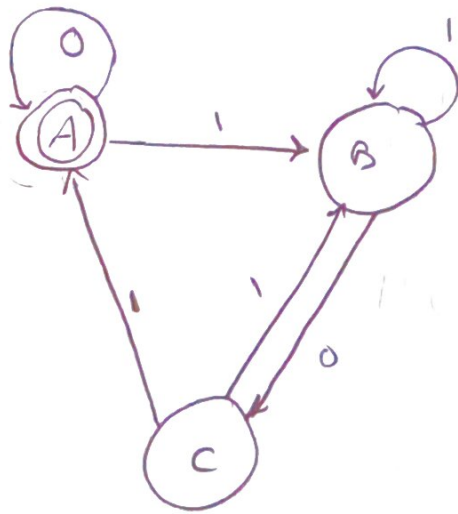
$$= \{5, 6, 7, 1, 2, 4\}$$

③



③

2



$$\text{RegEx.} = (0 + 1(1 + 01)^*01)^*$$

$$(0^* + 0^*1^+(01^*)^+1)^*$$

هذا فاصلاً لانه

يقبل ال String

1011

وصي مرفوضه فها ال NFA

المرفوضه